Claims:

1. A system for valuing and managing the risk of a plurality of credit instruments, said system comprising:

a) a database for storing credit instrument data;

b) a first calibration engine connected to said database, wherein said first calibration engine generates calibration parameters from said credit instrument data;

c) a second pricing engine connected to said database and said first calibration engine, wherein said second pricing engine is adapted to calculate the net present values and a plurality of valuation metrics for said plurality of credit instruments by modeling the underlying economic behavior driving the exercise of embedded options and other structural features of said plurality of credit instruments;

d) a third engine connected to said second pricing engine for performing simulation-based computations;

e) a fourth risk engine connected to said second pricing engine and said third engine for computing a plurality of risk and reward metrics; and

f) a report generator connected to said fourth risk engine for generating reports for use in managing risk.

2. The system as claimed in claim 1, wherein at least of said plurality of credit instruments is a loan.

3. The system as claimed in claim 1, further comprising at least one input data module for storing data relating to credit instruments in said database.

4. The system as claimed in claim 1, further comprising a portfolio hierarchy server.

5. A calibration engine for use in a system for valuing and managing the risk of a plurality of credit instruments, said calibration engine comprising:

a) a first module for generating a plurality of basis instruments from input data relating to said plurality of credit instruments, wherein said input data comprises at least one of prices, ratings, sectors, and terms and conditions;

b) a second module for generating a first term structure of risk-free zero prices and a risk-neutral process for interest rates from said plurality of basis instruments;

c) a third module for generating one or more basic spread matrices from said plurality of basis instruments and said first term structure of risk-free zero prices;

d) a fourth module for generating a second term structure of risk-neutral transition matrices and at least one smoothed credit spread matrix using said first term structure of risk-free zero prices, said module also adapted to develop generators using a transition matrix manager;

e) a fifth module for generating a third term structure of risk-neutral transition matrices for a specific named obligor from said at least one smoothed credit spread matrix, said first term structure of risk-free zero prices, and said second term structure of risk-neutral transition matrices; and

f) a sixth module for generating a plurality of spread volatility matrices.

6. The calibration engine of claim 5, wherein at least one of said modules of said calibration engine generates data subsequently stored in a Mark-to-Future cube.

7. A pricing engine for use in a system for valuing and managing the risk of a plurality of credit instruments, said pricing engine comprising:

a) a first module for defining a state space;

b) a second module for generating a state space by modeling the underlying economic behavior driving the exercise of embedded options and other structural features of said plurality of credit instruments;

c) a third cash flow generation module for generating cash flows for said plurality of credit instruments, whereby said credit instruments may be subject to different prepayment or credit state assumptions; and

d) a fourth module connected to said third cash flow generation module for generating a plurality of valuation attributes from said generated cash flows.